

## **IN THE CLAIMS:**

Claim 1 (currently amended): A method for protecting a civil aircraft from missiles with infrared seeker heads of portable anti-aircraft missile complexes, the aircraft having an engine with a level of radiation power, the method comprising the steps of:

detecting a launch of a missile from a location of launch, the missile having an infrared seeker head with an infrared sensitivity range, a power and an operation frequency  
determining the fact of a missile launch;

continuously determining missile instantaneous coordinates of the missile in flight after the launch in every time moment;

generating pulse-periodic pulsed laser radiation, wherein a wavelength range of the pulsed laser radiation being is within [[a]] the sensitivity range of the infrared seeker head, a power of the pulsed laser radiation exceeding the power of radiation of the aircraft engine in the sensitivity range of the infrared seeker head, and a pulse repetition frequency of the pulsed laser radiation being close to typical at about the operation frequency frequencies of the infrared seeker head heads; and

sending the pulsed laser radiation to the instantaneous coordinates of the missile in flight point-of-presence of the missile in the given time moment.

Claim 2 (currently amended): The method according to claim 1, further comprising the steps of:

calculating launch coordinates of the missile at the location of launch place;

transmitting [[an]] information on the occurrence of the launch on the fact of the missile launch and on the launch coordinates of missile launch place to [[the]] an earth safety flight providing system and an on-board aircraft objective control system.

Claim 3 (currently amended): The method according to claim 1, further comprising the steps of:

receiving ~~[[the]]~~ laser radiation reflected from the infrared seeker head;

determining ~~defining~~, by ~~[[the]]~~ a power level of ~~[[this]]~~ the reflected laser radiation, ~~the fact that the aircraft is being attacked by [[a]]~~ the missile with ~~[[just]]~~ the infrared seeker head;

~~defining, on determining, by a~~ lowering of the power level of ~~[[this]]~~ the reflected laser radiation, ~~a the fact of failure of guiding of~~ the infrared seeker head to the aircraft;

thereafter, terminating the generation of the laser radiation; and

transmitting ~~[[the]]~~ information on the ~~fact of~~ failure of guiding the missile to ~~[[the]]~~ an earth safety flight providing system and an on-board aircraft objective control system.

Claim 4 (currently amended): A system for protecting a civil aircraft from missiles with infrared seeker heads of portable anti-aircraft missile complexes, the system comprising, on board the civil aircraft being protected:

launch sensors for detecting a launch of a missile from a location of launch, the missile having an infrared seeker head with an infrared sensitivity range, a power and an operation frequency of the fact and coordinates of missile launch;

a coordinate sensor for sensing instantaneous coordinates of the missile in flight after the launch;

a transceiver having a turn drive and an optical channel ~~which with an~~ output ~~[[is]]~~ connected to ~~[[a]]~~ the coordinate sensor ~~of missile coordinates at a missile flight trajectory;~~

an on-board calculator; and

a laser radiation generator having an actuation device;

wherein the laser radiation generator ~~being made of~~ is a fluorine-hydrogen-deuterium ~~[[type]]~~ laser radiation generator, the on-board calculator processing ~~being configured to process~~ signals from the launch sensors of the fact and coordinates of missile launch for calculating launch coordinates of ~~[[a]]~~ the missile launch place location and for providing a control signal to the turn drive of the transceiver in order for an optical channel of the transceiver to be directed to the launched missile, as well as to process signals from the coordinate sensor ~~of missile coordinates at a missile flight trajectory~~ for calculating the instantaneous missile coordinates in the given time moment and for providing an actuating signal to the actuation device of the laser radiation generator.

Claim 5 (currently amended): The system according to claim 4, wherein the on-board calculator ~~is configured to transmit the~~ transmits information on the occurrence fact of the missile launch and on the launch coordinates ~~of missile launch place~~ to ~~[[the]]~~ an earth safety flight providing system and an on-board aircraft objective control system.

Claim 6 (currently amended): The system according to claim 4, further comprising a reflected laser radiation receiver connected to an additional output of the optical channel of the transceiver ~~and intended~~ for providing signals to the on-board calculator which determines ~~defines is further configured to define~~, by ~~[[the]]~~ a power level of ~~[[this]]~~ the reflected laser radiation, ~~the fact that the aircraft is being attacked by a missile with~~ ~~[[just]]~~ the infrared seeker head, and to determine ~~define~~, on lowering of the power level of ~~[[this]]~~ the reflected laser radiation, ~~the fact of a~~ failure of guiding of the infrared seeker head to the aircraft; to provide to the actuation device of the laser radiation generator an actuating

signal which terminates the generation of the laser radiation, and to transmit [[the]] information on the ~~fact of failure of guiding of~~ the missile to the earth safety flight providing system and aircraft objective control system.

Claim 7 (currently amended): The system according to claim 4, wherein the launch sensors ~~of the fact and coordinates of missile launch~~ are sensors of [[the]] ultraviolet radiation range.

Claim 8 (currently amended): The system according to claim 4, wherein the coordinate sensor ~~of missile coordinates at a missile flight trajectory~~ is a narrow-directed sensor of [[the]] ultraviolet radiation range.

Claim 9 (currently amended): The system according to claim 4, wherein the optical channel of the transceiver [[is]] further transmits ~~intended to transmit~~ the radiation of the laser radiation generator towards the launched missile.